

COMMENT MATRIX
CITATIONS FROM COMMENTS RECEIVED BY THE
DELTA STEWARDSHIP COUNCIL BETWEEN
SEPTEMBER 15, 2010 AND OCTOBER 14, 2010

The following matrices include direct citations from comments received by the Delta Stewardship Council (Council) between September 15, 2010 and October 15, 2010. The citations are directly from letters and emails, and were not corrected for misspellings or grammar. Many comments were excerpted due to the length of the comment. All of the letters and emails are located on the Council website. The comments were placed into eight categories, as summarized below. Several comments occur in several categories. These comments do not include comments submitted to specific work groups.

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Matrix 1 List of Commentors

Association	Signatory	Date
Bartkiewicz, Kronick, & Shanahan	Bezerra	9/20/2010
California Department of Fish and Game	McCamman	9/9/2010
California Farm Bureau	Scheuring	9/29/2010
Commentor (Ray Seed)	Seed	9/16/2010
Delta Counties Coalition	Nejedly Piepho	9/15/2010
State and Federal Contractors Water Agency	Buck	9/15/2010
State and Federal Contractors Water Agency	Buck	9/16/2010
State and Federal Contractors Water Agency	Buck	9/21/2010

Matrix 2 Comments Related to Delta Plan

Association	Date	Comment	Status of Comment
California Department of Fish and Game	9/9/2010	Department request Delta Stewardship consideration of the Ecosystem Restoration Program Plan for Year 11 which identifies activities that are scheduled to be accomplished during State Fiscal Year (FY) 2010-2011 and for Federal FY 2011. The Ecological Restoration Program (ERP) continues under the 30 year CALFED Record of Decision (ROD).	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to biological resources.
California Farm Bureau	9/29/2010	The California Farm Bureau Federation ("Farm Bureau") has reviewed the September 24, 2010 presentation of the Environmental Water Caucus ("EWC") to the Delta Stewardship Council, and urges you to reject the EWC recommendation that the Council set up a work group to pursue the EWC policy prescriptions.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives.
California Farm Bureau	9/29/2010	The EWC "alternative" asks the Council to, in essence, depart from the co-equal goals defined in Water Code section 85054 by ignoring water supply reliability for a large portion of California's economy and population. It does this by disclaiming any need for new infrastructure, by calling for the apparent retirement of more than a million acres of productive farmland, by throttling the operations of the Central Valley Project and the State Water Project south of the Delta, and by relying upon sweeping and dubious application of legal doctrine to "reform" the system of California water rights. Perhaps most staggering, it offers a vision of 8 million acre-feet of agricultural water use savings through simple efficiency measures. In reality, this approach would really require the Council to meet the co-equal goal of water supply reliability by finding that California farms and ranches just do not need much water - and that the conveyance solution in the Delta is, essentially, no conveyance.	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to water resources.
California Farm Bureau	9/29/2010	In point of fact, California farms and ranches depend upon reliable water supplies, and California's farmers and ranchers have nearly doubled their production of food and other farm products in the last 40 years while using a largely constant amount of water. More and more crops are on drip irrigation, micro-sprinkler, and other efficient water systems, and yet California remains the nation's top agricultural producer with a farm economy estimated at an annual \$34.8 billion. Farm Bureau expects California to retain its pre-eminent position in agriculture in coming years, always if incrementally on a more water-efficient basis, but sudden "water shock" such as proposed by EWC would cause major disruption to the agricultural economy and California's political fabric.	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to water resources, agriculture, and agricultural economics.
California Farm Bureau	9/29/2010	Salts and toxics are management problems in any system of irrigated agriculture, and pricing is a valid policy question.	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to water quality and agriculture.

Matrix 2 Comments Related to Delta Plan

Association	Date	Comment	Status of Comment
California Farm Bureau	9/29/2010	...water recycling, desalination, groundwater and surface storage, and constant efforts at urban and agricultural efficiency are all potential parts of the water solution spectrum for California.	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to water resources.
California Farm Bureau	9/29/2010	What is most problematic with EWC's vision is that it is unbalanced, it remains export- and agriculture-centric, and it may obscure obvious policy necessities by placing a large and politically untenable burden on California farms and ranches...	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to water resources, agriculture, and agricultural economics.
California Farm Bureau	9/29/2010	...strictly in environmental terms, it should be noted that the inevitable outcome of the EWC "alternative" is the off-shoring of much agricultural production to other countries, which is an environmentally myopic approach. Few countries have the regulatory framework that California farmers operate within, and whether measured in food-miles or measured in terms of comparative local environmental impact, the general global result is the California agriculture is the preferred environmental alternative.	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to agriculture and economics.
Commentor (Ray Seed)	9/16/2010	The keys to emergency response are planning, preparation, and practice (the three P's). Omission of any one of these is a bad idea.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Emergency response with regard to Delta flood risk has two main flavors: (1) protection of life safety, and (2) protection of water transmission and property (economic issues). Environmental issues are also important, but they will be less urgent in any disaster scenario.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	There are three basic types of risk or "threat": (1) "regular" non-seismic levee failures (e.g. overtopping, through-seepage and erosion, underseepage, slope instability, burrowing rodents, etc.), (2) potential terrorism, and (3) seismic levee damage.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	As we discussed, levees are very challenging due to the adverse terrain and geology upon which they must be sited, their lengths traversed, inadequate budgets for engineering field exploration and also for analysis, lack of public and political attention for long time spans, lack of budgets and/or attention for long-term maintenance, ongoing degradation over time (settlements, cracking, progressive erosion, etc.), and other issues.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	It will never be cost-feasible to render the roughly 1,100 miles of levees in the Delta fully immune to potential failure, so we can expect that non-seismic failures will continue to occur over time.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 2 Comments Related to Delta Plan

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	High water events are predictable (they can be accurately forecast), and so they are usually monitored...“Flood fighting” is the combined activity of: (1) locally inspecting and closely monitoring levees (usually by driving along the levee crests and walking the levee faces and toes) during high water events, and then (2) intervening (with construction crews, equipment, and materials) to attempt to forestall any incipient failures before they can develop fully...Many Delta islands are sparsely inhabited, and many Delta levee districts (islands) in the Delta cannot afford much or any flood fighting, and so many Delta levees are often poorly monitored during periods of high water risk. And, occasionally, levees fail not during high water events; so they “surprise” us.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	...one of the keys to life safety is to understand that Delta floodwaters will be cold; typically on the order of 45° to 60°F, and that people cannot long persist (nor swim) in such temperatures...Saving lives in the Delta means getting people quickly out of the water. Fortunately, for non-seismic levee breaches, that is a fairly straightforward task. When non-seismic levee failures occur, they are finite “breaches”. These initiate at a given location, and then as the floodwaters begin to rush through into the island these widen and deepen due to erosion (or “scour”) from the intruding floodwaters. They often grow to widths of several hundred feet in the first hours, and then widen (and deepen) more slowly after that as the intruding waters are slowed by the waters already ponding within the island or tract. Because these are openings of finite width, the islands fill relatively slowly. It can take up to a couple of days to fully fill a large island. So the waters rise relatively slowly. The result is a low level of risk with regard to life safety, as people have time to migrate to higher ground (e.g. the top of the nearest levee).	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Response would thus entail learning about the breach, and then mobilizing and delivering the necessary helicopters and boats. DWR are usually among the first to be notified when breaches occur, and both DWR and 911 notifications need to be routed to those who can best provide the necessary rescue resources. Preparation would consist of “education” of inhabitants as to the risk, and telling them to make their way to the nearest levee crest road if they possibly can. Otherwise, stay put and wave down rescuers as they arrive. Helicopters and boats would have to be available, and operators of those would have to understand the situation and the timeline (as the waters rise.) Also the dangers of submerged obstacles that might sink boats. Again, planning and practice.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 2 Comments Related to Delta Plan

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	Recent exercises have consisted of putting small numbers of people (usually a dozen or less) into relatively warm puddles in the Delta, and then lifting them to safety with helicopters and winches; and announcing that we are well prepared. That is falsely reassuring and not very useful. Better practice scenarios would entail plucking people from rooftops or windows of buildings, with overhead power lines and antennas as possible complicating obstructions, and likely in the wind and rain (as these usually accompany high water events.) Both boats and helicopters would likely be needed.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Levee breaches are repaired by first “armoring” the two ends of the opening to prevent further erosion as tides carry water into and out through the breach twice each day. Large rock is used for this armoring. There are only a finite number of quarries that can produce such rock in the region, and only one that can do so quickly and in bulk. That is the Dutra quarry on the shore of San Pablo Bay, and it is constantly under legal siege from nearby homeowners who wish to shut it down to eliminate the noise (explosives blasting) from the quarry...The need for rock in the Delta is certainly a strategic security issue for the State of California, and likely also for the Nation, and it has long been my recommendation that either the State or the Fed’s declare the Dutra quarry a vital strategic resource and so protect the availability of rock for the coming century (or so)...The other potential sources of rock are quarries in the foothills to the east, but they cannot produce it quickly in similarly large quantities, and it must be transported by trucks (rather than by barge). If rock from these other quarries was to be stockpiled in sufficiently large quantities, then the strategic need for the Dutra quarry could be reduced.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	An important policy consideration for the Council is that, prior to about 2004, the U.S. Army Corps of Engineers (USACE) used to respond jointly with DWR to address and repair Delta levee breaches. Then it was realized that the Corps was actually not supposed to be doing that; it was beyond their mission, especially as most Delta levees are “non-project” levees in which the Corps officially has no stake. So now DWR are on their own. DWR can handle single breaches, but as we will next be discussing first multiple breaches, and then even worse seismic damage scenarios, it will become important to consider how Federal (and even potentially military) assets might be mobilized. As a policy issue; the security and reliability of the Delta and its water transmission role are key State and National security issues, and it should be possible to get the USACE formally tasked to respond to levee failures that are larger than a single, isolated breach (e.g. by Act of Congress, or similar.)	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 2 Comments Related to Delta Plan

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	Retrieval (unwatering) of property and assets (buildings, rail lines, gas facilities, etc.) has historically been done by pumping out the islands, but there has been no systematic effort to then help with restoration of functionality. And that has worked fine so far. Most people (and corporations, etc.) understand that there is some risk, and they have historically made their own efforts to restore their assets. Or to insure them. Some thought might be given to this by the Council. Trains can be re-routed around a damaged island, and supplemented with trucks, until disrupted rail service is restored. The PG&E gas storage facilities in the central Delta are interesting, as the Bay Area relies heavily on those during December and January (as gas transmission capacity is too limited to bring enough gas to the Bay Area during these two cold months); but we are hardly the North Pole, and this may be an acceptable risk. The current precedent is to let people (and corporations and utilities, etc.) fend for themselves in this regard. Changing that could open a can of worms. But changing the levels of protection provided Delta-wide as part of the evolution of the Delta under the Council's benevolent new management may eventually require consideration of policy changes here, as well as other potential steps such as grouping (or "bundling") of key assets into protected islands or corridors, etc.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	In the unusual situation wherein several levee failures occur during a single event, the issue would only be one of scale. Sufficient resources would need to be available to address several rescues, and several levee repairs. DWR would be somewhat challenged to handle this on their own, and it is here that pre-arrangement for sharing of resources and responsibilities with Federal agencies (e.g. the USACE, the Coast Guard, etc.) might begin to be especially valuable.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	being prepared for potential seismic disruption of the Delta; as will be discussed next. What is missing here, on a policy level, is a requirement that water agencies maintain some required minimum reserve for emergencies.... no matter what. Also, a requirement that water agencies do a better job of cross-connecting their lines so that in a serious water emergency the State can literally commandeer water and move it to where it is most needed.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 2 Comments Related to Delta Plan

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	The main differences between non-seismic and seismic levee damage, however, are those of scope and scale. Non-seismic levee failures can produce a limited number of localized “breaches”, each of which can be relatively quickly repaired. An earthquake can produce soil liquefaction (loss of strength of sandy levee foundation soils and sandy levee embankment soils) such that the soils largely become “fluid” in their characteristics. This can produce catastrophic slumping and instability of levees, and this is not a localized phenomenon; this can occur for many contiguous levee miles. A mid-sized east bay Earthquake can produce many tens of miles of such failures, and larger events can produce more than a hundred miles of levee failures and slumping. The result will be damages that simply cannot be rapidly repaired. Much of the Delta will be temporarily transformed to a shallow inland bay. We will not be “filling” in finite holes (or “breaches”), instead we will be re-constructing many miles of levees largely from scratch. And much of the work will have to be done from barges. With no finite holes to fill, large rock will not be needed to armor the ends of breaches. Instead, dredging and wholesale earthmoving on a massive scale will be needed to rebuild the damaged and slumped levee sections. It will take multiple years to accomplish this, especially if we do not make realistic and prudent preparations in advance (as is the current situation). Accordingly, restoration of water delivery will instantly become both the top State and likely also the top National priority.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Because of the lack of warning, seismic damage and flooding will come as a surprise. The scale of the damage, which may include flooding of a majority of the Delta islands in a worst case scenario, will be extensive. Because we will not be dealing with “breaches” of finite dimensions, some islands will fill very quickly, and the rapidly rising floodwaters will pose a significant threat to life safety. And the Delta will not be the only location affected. Appurtenant regions (e.g. the more populous Bay Area, Sacramento’s “pocket”, Natomas basin, etc.) will also likely be affected, so emergency response assets will be stretched in many directions all at once.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 2 Comments Related to Delta Plan

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	<p>Given that tens of thousands of people may have to be rescued very quickly from what will quickly become dangerously deep waters in the Sacramento “pocket” and/or from the Natomas basin, it may be anticipated that many in the Delta will simply have to fend for themselves in the critical first few hours. Preparation, and education, will thus be vital. People will need to understand the potential risk, and to have thought about what they will do. Boats will be needed, on each island or tract, that can float freely to the surface as the waters rise, and that have gas for their engines so that they can serve as a local rescue capability. People who can’t make their way to a nearby levee crest (or who have no nearby levee crest because it slumped away beneath the waters) will have to be shuttled to intact “high ground” (surviving levee crests) to await further rescue. Time will be of the essence, and people with boats will have to be taught to deposit their own families on the remaining intact levee crests, and then go back for others, rather than spending an hour or more to get their own families fully removed to solid ground. In the cold waters, those who are not quickly removed from those waters (e.g. 20 to 30 minutes or less) will suffer hypothermia, and then they will drown.</p>	<p>This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.</p>
Commentor (Ray Seed)	9/16/2010	<p>In legacy towns, which have higher concentrations of people, it would be advisable to provide some number of buildings of sufficient height (and with sufficient rooftop accessibility, even for the old and infirm) as to represent a temporary refuge above the waters until rescue can arrive. Ditto for “urban” communities around the edges of the Delta.</p>	<p>This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.</p>

Matrix 2 Comments Related to Delta Plan

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	Current estimates are that it will take three to five years to restore the Delta sufficiently as to resume water transmission and delivery to the Bay Area and to southern California. That will create a situation without precedent, and it is difficult to predict how that will play out with regard to potential abrogation of environmental laws and other expedient measures to restore water delivery as quickly as possible. A better solution would be to be prepared for this before it happens. We are currently fully unprepared. Preparation would include considering serious, and potentially feasible options for dealing with a water system disaster. Potential rationing and even State or National commandeering of water supplies may occur. The San Joaquin River system, and its dams, may be re-directed towards providing water for delivery south-of-the Delta, and farming (and use of pesticides and fertilizers) in the San Joaquin watershed may be banned for several years to improve runoff quality and amounts. But that will not likely be nearly enough. Emergency storage south-of the-delta will, of course, also be vital. We will all have to hope that these emergency storage reserves have been diligently maintained, even in the face of what usually appear to politicians and decision-makers as “more urgent” short-term demands on such water. As a policy matter, utilities could be required to be fully diligent with regard to such emergency storage; even in the face of “regular” drought, etc..	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Current efforts to stockpile rock are useful for individual, finite, non-seismic failures but they will be of little value for seismic damages (except for the potential use of mobile rock barriers to re-direct streams and channels as the levees begin to be restored.) What will be needed will be massive resources, of the type that only the Federal government can reasonably bring to bear. And barges...There are only a finite number of construction barges able to do this type of work from the water available on the west coasts of North and South America. We'll need all of them, or at least as many as we can get, and plans should be made for acquiring them. Additional barges are available on the east coasts, and they can be brought through the Panama Canal.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 2 Comments Related to Delta Plan

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	Plans should be in place for restoration of levees and also for restoration of water system serviceability. Ecosystem considerations should be included in the criteria, and ecosystem advocates should be positively engaged here based on the understanding that in the alternative of workable solutions the resulting chaos will likely lead to less attractive approaches that will produce devastating ecosystem damages. In the all too likely case that constructive agreement proves to be unworkable, then tough decisions and contingency plans will have to be made in the absence of agreement.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	It will be vital to coordinate local, State and Federal water utilities and agencies. Collaborative wielding of resources (especially storage reservoirs, and their controllable releases, and pumps, etc.) will be of vital importance, and probably over a period of several years. Response planning should include gathering together the key State and Federal decision-makers in a command center, where all necessary information can be made available and where the necessary decisions can be made; in the first hours, over the first days, and over the weeks and months that will follow. Prior agreements will have to have been reached as to who is in charge. Petty rivalries will have to be put aside. Leadership will be needed. And “practices” will have to be held. Role playing scenarios in which the actual parties work their way through scenarios, learning their roles, tuning the overall response plans, and getting to know their counterparts (partners) from other agencies and services.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Plans B and C might look like: (B) planning to re-work the San Joaquin River system to provide as much water as possible for south-of-Delta water needs, severe rationing, banning water use for landscaping outright, etc., in order to stretch emergency water supplies as far as possible, and (C) placing large soil berms along selected sections of a through-Delta channel that might then be “rapidly reparable” in the wake of a major seismic event.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 2 Comments Related to Delta Plan

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	Wide soil berms could be placed now, in preparation for a potential seismic event, on the landward side of the levees along such a channel (on the agricultural fields) with little adverse ecosystem impacts. If sections of the adjacent levees then slumped and failed during the earthquake, the adjacent elevated berms would be available to serve as the already partially constructed bases of the new (replacement) levee sections. For sections that do not slump and fail, the adjacent berm materials (soils) would be available as borrow material for use in construction of replacement levees at sections which did suffer damage. And again without major adverse ecosystem impact, as would otherwise occur with dredging of levee fill soils from the river channels. Seasonal re-establishment of partial water delivery might be rapidly accomplished in this manner, and moveable rock berms could be used to direct (and re-direct) flows as necessary due to changing water conditions and ongoing repair progress. This would be a crude and temporary water transmission system, and far from a perfect solution.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Short-Term Actions: 1. Realistic Emergency Response Plans (vs. "Denial"): - Realistic appraisal of the actual situation. - Logistics (contacts, coordination, resources, chain of command, etc.) - Boats.... the "Natomas Navy", on every island and tract; untethered on their trailers and with 30 feet of rope, so that they can float to the surface and be available as rescue craft. Map the locations of these, and provide boats for communities that don't have enough. The cost would be low (most would volunteer), and administrative costs would be low as well. - Evacuation (mandatory standards....) - Plan, and practice - Cost of preparation vs. the cost of not being prepared (e.g. new Orleans) - The adverse role of denial in public policy and public safety - The value of back-up Plan's B (e.g. the Deepwater Horizon platform disaster and oil spill	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Short-Term Actions: 2. Warning and Notification (and Education): - Two blue lines on lamp posts and sign posts at the 100-year flood level - Mapping and disclosure - Teach appropriate personal/family response planning	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Short-Term Actions: 3. Preparation: - Building codes: require neighborhoods potentially susceptible to deep inundation to have some accessible rooftops above the 100-year flood level - In New Orleans, the new building codes require potential egress from attics so that people won't again be trapped and drowned by rising waters - Maps of locations of boats/boat marshals..... provide additional boats where needed - Improve levees/flood protection for larger communities (e.g legacy towns, Stockton, etc.)?	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 3 Comments Related to Early Actions

Association	Date	Comment	Status of Comment
State and Federal Contractors Water Agency	9/16/2010	We are writing to express our significant concern with the “early action” proposal submitted by Water 4 Fish (Richard Pool) seeking closure of the Delta Cross Channel (DCC) for two weeks in October of this year and subsequent years. While the submittal provides a review of the hypothesized benefits of the action, it fails to acknowledge the very real impacts to the water supply reliability branch of the co-equal goals, as well as water quality concerns. For that reason we supported your staff’s recommendation to return this item to the applicant for further analysis. That further analysis should be in the form of a CEQA and NEPA document as we believe this action is subject to both statutes. Until such analysis is provided and significant impacts are mitigated or shown to be otherwise acceptable in light of benefits gained, we are opposed to the proposed action.	This comment is consistent with discussions by the Delta Stewardship Council for this Early Action application.
State and Federal Contractors Water Agency	9/16/2010	We suggest the proponents first seek additional releases of water by EBMUD, inasmuch as the Mokelumne hatchery and performance of the hatchery is a mitigation obligation of EBMUD due to loss of spawning and rearing habitat caused by construction of their upstream reservoirs. At the point EBMUD is providing water for fishery benefits to the point of its customers incurring a 55% water supply shortage would then be the time to raise question whether others already suffering such shortages, which did not create the fishery problem on the Mokelumne but can help with recovery, should be asked to contribute further. Alternatively, as stated at your meeting September 14th, we would be supportive of the proposal if EBMUD committed to holding the SWP and CVP export contractors harmless to water supply impacts through transfers of water from EBMUD or other non SWP/CVP sources, and if water quality impacts were sufficiently mitigated.	This comment is consistent with discussions by the Delta Stewardship Council for this Early Action application.

Matrix 4 Comments Related to Administrative Procedures

Association	Date	Comment	Status of Comment
Bartkiewicz, Kronick, & Shanahan	9/20/2010	...the proposed deadline for agencies whose actions are appealed to the Council to submit their administrative records - is not workable and should be modified to put the initial burden of production on the party that files the appeal. Accordingly, sections 4 and 6 of those proposed procedures should be revised...These proposed procedures are not workable because the administrative records that may be before agencies when they approve projects that may be appealed to the Council can be extremely large and it simply is not possible for an agency to assemble, organize and produce such a record's table of contents in 10 days,	This comment was considered, but not included in the final Administrative Procedures. The Council will consider revisiting this type of issue if the procedures prove unwieldy in application.
Bartkiewicz, Kronick, & Shanahan	9/20/2010	The Council's proposed rules state that the reason such speed is required in handling appeals is that the Council has been given only brief periods in which to hear and decide appeals...it would be possible to address this fact and still establish rules concerning the submission of records developed by agencies that equitably allocate the burdens of providing the Council with sufficient information to make its decisions. Such rules would: 1. Require parties filing appeals to submit, with their appeals, as much information as possible concerning the decision that they are appealing - such information should be available to those parties under the Public Records Act within their 30-day window to file their appeals; 2. Require agencies whose decisions are appealed to produce only that information from their administrative records that is relevant to their certifications of consistency with the Delta Plan, rather than their entire administrative record; and 3. Declare that the Council will decide an appeal based solely on the information submitted by the party filing the appeal and the agency whose action is appealed.	This comment was considered, but not included in the final Administrative Procedures. The Council will consider revisiting this type of issue if the procedures prove unwieldy in application.

Matrix 4 Comments Related to Administrative Procedures

Association	Date	Comment	Status of Comment
Bartkiewicz, Kronick, & Shanahan	9/20/2010	Proposed Edits: 4. b) A state or local agency shall submit to the council, no later than 10 days after receiving notice of an appeal pursuant to Paragraph 8, <u>the information on which the record that was before the state or local agency relied in adopting its certification at the time it made its certification.</u> Within 15 days of that submission, the agency shall <u>submit to the council, including a table of contents for the information that the agency has submitted as supporting its certification of documents contained therein and a brief chronology of events and actions relevant to the covered action. The record shall be certified by the state or local agency as being "full and complete." The council will decide the appeal based solely on the information submitted by the party filing the appeal under Paragraph 6 and the information submitted by the agency under this subparagraph 4(b).</u> Given the tight, statutory deadlines for hearing and deciding appeals, a state or local agency is nevertheless strongly encouraged to submit the record at the time it files its certification of consistency, to ensure the opportunity for thorough review by the council in the event of an appeal.	This comment was considered, but not included in the final Administrative Procedures. The Council will consider revisiting this type of issue if the procedures prove unwieldy in application.
Bartkiewicz, Kronick, & Shanahan	9/20/2010	Proposed Edits: add to end of 6: <u>The appeal shall be filed in electronic form. In addition, the appellant shall deliver to the council all documents or other information on which the appeal is based. The appellant shall ensure that the council receives those documents or other information within two business days of when the appellant files its appeal.</u>	This comment was considered, but not included in the final Administrative Procedures. The Council will consider revisiting this type of issue if the procedures prove unwieldy in application.
Delta Counties Coalition	9/15/2010	We are requesting that the staff and Council consider the following as you take final action on the recommended appeals procedures: 1. The issues and positions of the Delta Counties Coalition as contained in our letter of August 17, 2010 to the Council. 2. That language in the Interim Plan be consistent and harmonize with the recommended Administrative Appeals Procedures. Examples of this are contained in the Final Draft of the Interim Plan on pages 32 and 33 (red line version). 3. That the Council procedures require a de novo hearing on the inclusion of the BDCP in the Delta Plan.	As recommended, more detail was added to the BDCP appeal process, however the "de novo" standard was not included in the final administrative procedures.

Matrix 4 Comments Related to Administrative Procedures

Association	Date	Comment	Status of Comment
Delta Counties Coalition	9/15/2010	With regard to the BDCP the Delta Counties Coalition supports the Council's de novo review of BDCP appeals and encourages the Council to maintain that provision in the Administrative Procedures. This independent review by the Council is appropriate, especially since the Council is responsible for preparation of the Delta Plan and for incorporating the BDCP in the Delta Plan.	As recommended, more detail was added to the BDCP appeal process, however the "de novo" standard was not included in the final administrative procedures.
Delta Counties Coalition	9/15/2010	While DF&G may make an initial determination that the BDCP meets the requirements of Section 85320, the Delta Reform Act designates the Council as the ultimate arbiter of that determination. Any appellant should be able to rely on the Council to fulfill this supervisory role in an objective, independent manner, which can only be accomplished through de novo review. The plain meaning of the Delta Reform Act grants the Council broad discretion in deciding on BDCP appeals and necessarily so. If the BDCP is to be included in the Delta Plan, there must be some provision to ensure the BDCP is compatible with the Delta Plan. The criteria set forth in Section 85320 are entirely consistent with the co-equal goals that the Delta Plan is meant to further.	As recommended, more detail was added to the BDCP appeal process, however the "de novo" standard was not included in the final administrative procedures.
Delta Counties Coalition	9/15/2010	The compliance decision is not a legal decision or a regulatory decision; it is a policy decision. The Delta Reform Act does not require the Council to defer to a regulatory agency (DF&G) for this policy decision. The Council should adopt the de novo review standard to ensure its independent judgment and discretion for this policy decision as envisioned by the statute. Accordingly, the Delta Counties respectfully ask the Council to maintain independent review through inclusion of the de novo provision in the administrative procedures and ensure language consistency in the Interim Plan.	As recommended, more detail was added to the BDCP appeal process, however the "de novo" standard was not included in the final administrative procedures.

Matrix 4 Comments Related to Administrative Procedures

Association	Date	Comment	Status of Comment
State and Federal Contractors Water Agency	9/15/2010	While the addition of “de novo” into the proposed final draft language of paragraph 23 of your administrative procedures pertaining to appeals, and in this instance an appeal of the BDCP certification, provided clarity, we repeat our objection that it is beyond the Council’s authority and its proper role as established in the Act. We concur with Council Member Marcus who stated she “does not read” a “de novo” BDCP review role for the Council as a part of the Act. Instead, the Council’s ability to review a third party appeal of the DFG certification of the BDCP under section 85320 (which will entail an open and transparent process itself) was intended to provide a check that DFG had not arbitrarily carried out its responsibilities by ignoring significant criteria or approving an NCCP that was inconsistent with the requirements of the NCCPA.. This interpretation is consistent with traditional review of agency actions by an oversight body, whether it is the Council or the Courts. To replace the professional judgment of the expert agency, the standard must be that there is no substantial evidence in the record that supports the agency’s decision. We repeat our contention that that is the appropriate standard in this instance as well.	The recommended "abuse of discretion"/"substantial evidence" standard was considered but not included in the final.
State and Federal Contractors Water Agency	9/15/2010	With regard to CEQA compliance for the BDCP and satisfaction of the related specified requirements in the Act, the Council will have already had a role in the process through its activities as a Responsible Agency. We expect the Council, should it have concerns about whether the BDCP EIR/EIS satisfies CEQA and related criteria under section 85320(b)(2), would raise them in writing to the lead agencies, as would be standard practice. Consequently, there should be no surprises as the environmental documents are finalized and it should be expected that reasonable concerns raised by the Council would be satisfactorily addressed. Further, if this is not the case, CEQA itself, in Guidelines section 15231, establishes the process for addressing responsible agency concerns with a final EIR. In the absence of a legal challenge to the EIR by the responsible agency, the responsible agency is required to treat the EIR as adequate until adjudged otherwise in a timely filed court proceeding. This process would need to be followed by the Council as section 85322 states that the Act does not alter the obligations otherwise required by CEQA.	The recommended "abuse of discretion"/"substantial evidence" standard was considered but not included in the final.

Matrix 4 Comments Related to Administrative Procedures

Association	Date	Comment	Status of Comment
State and Federal Contractors Water Agency	9/15/2010	Finally, the provision allowing for the Council to appeal the DFG's NCCP and CEQA certifications to itself is inappropriate and inconsistent with the appellate role provided to the Council by the Act. In the absence of an appeal by a third party, the Act clearly states that the Council, upon receipt of the DFG certification, "shall" incorporate the BDCP into the Delta plan. Only if an appeal is filed does the Council's appellate authority arise. In other words, the appellate review body must await an appeal by a third party before it can carry out its function and exercise its judgment. To do otherwise turns the notion of the Council's proper appellate role on its head and belies a potential lack of impartiality central to that role. We respectfully request that the Council remove the provision allowing it to appeal the DFG certifications to itself for review.	This comment was considered during completion of the Administrative Procedures, but not included in the final procedures.
State and Federal Contractors Water Agency	9/15/2010	...we offer the following language as substitutes for paragraphs 23 and 25 of the final draft administrative procedures considered at your August meeting: 23. The council's decision shall be based on review of the department's record to determine whether the department has abused its discretion by not proceeding in the manner required by law, by not supporting its determinations with findings, or by not supporting its findings with substantial evidence in light of the whole record. The Council's decision shall include specific written findings...25. The department may revise its determination to meet the issues raised by the council, or may respond to the council's issues in detail, setting forth reasons why it has concluded that the plan meets all of the requirements of section 85320.	This comment was considered during completion of the Administrative Procedures, but not included in the final procedures.
State and Federal Contractors Water Agency	9/15/2010	We also request that the newly proposed Section 22.5 be deleted in its entirety. In particular, paragraphs 22.5(b) and (c) inappropriately allow for the submittal of information beyond that in the record before the DFG when it applies its expert judgment to the question of BDCP NCCP and CEQA certification under the Act. Paragraphs (a) and (d-g) are common-sense administrative guidelines that do not need to be codified.	This comment was considered during completion of the Administrative Procedures, but not included in the final Administrative Procedures.

Matrix 4 Comments Related to Administrative Procedures

Association	Date	Comment	Status of Comment
State and Federal Contractors Water Agency	9/21/2010	We appreciate the staff presenting options to the Council for discussion under Item 8 for your meeting on September 23, 2010. However, we request the Council also consider the language we offered in our September 15 letter (attached) as an alternative, since the SFCWA-proposed language most closely comports with the law regarding appeal of administrative agency determinations and is consistent with the intent of the Delta Reform Act to provide an opportunity for a review of the DFG certification to ensure its reasonableness. Should the Council decide to choose from the options provided by staff, then we urge the Council to adopt Option 3 for Paragraph 23 because that alternative specifically recognizes that the appeal should be handled “based on applicable law”, including substantial evidence review on the record before the Department of Fish and Game. We believe it would be appropriate to add to Option 3 the following language proposed by your staff in its Option 2 to ensure the highest level of understanding and communication between the Council and DFG should an appeal occur: “The council may seek clarification from the department of its reasoning and factual findings prior to the council making its final decision.”	This comment was considered, however Option 2B, as outlined in the staff report, was included in the final Administrative Procedures.
State and Federal Contractors Water Agency	9/21/2010	We remain opposed to the allowance in Paragraph 18 for Council members or the Executive Officer to appeal the DFG BDCP certifications to the Council. As an appellate body, the Council is supposed to be “above the fray” so to speak and the allowance for self-appeal is inconsistent with that status and the adjudicative detachment required to exercise impartial judgment. Instead of including language providing such an allowance, that language should be replaced with language precluding an appeal from Council members or Council staff.	This comment was considered during completion of the Administrative Procedures, but not included in the final Administrative Procedures.
State and Federal Contractors Water Agency	9/21/2010	We also believe that Section 23.5(b) as proposed is contrary to applicable law as it appears to authorize “any” new evidence by “testimony,” specifically adding that this new evidence need not be limited by the record before the Department of Fish and Game. This “evidence” and “materials” shall become part of the hearing record even though it appears that minimal, or none, of the rules relating to evidence and witnesses will apply to this new information. Section 23.5(b) should be deleted or significantly revised to reflect the applicable law with respect to review of administrative agency decisions.	This comment was considered during completion of the Administrative Procedures, but not included in the final Administrative Procedures.

Matrix 4 Comments Related to Administrative Procedures

Association	Date	Comment	Status of Comment
State and Federal Contractors Water Agency	9/21/2010	Paragraph 19(c) should be stricken as well. The proposed language provides for a joint hearing to satisfy 85320(d) and (e). This is inappropriate. The hearings contemplated in those two sections are not compatible with being combined. A hearing “concerning the incorporation of the BDCP into the Delta Plan” is inapposite with a hearing considering an “appeal” of DFG’s “determination that the BDCP has met the requirements” of the Act. The former is an administrative function that will need to focus on the effective melding of the BDCP with the Delta Plan, while the latter is a quasi-judicial activity that has nothing to do with the Delta Plan per se. Paragraph 19(c) should be deleted.	This comment was considered, but not included in the final Administrative Procedures. If the situation arises, the Council may revisit this issue.

Matrix 5 Comments Related to Water Resources

Association	Date	Comment	Status of Comment
California Farm Bureau	9/29/2010	...water recycling, desalination, groundwater and surface storage, and constant efforts at urban and agricultural efficiency are all potential parts of the water solution spectrum for California.	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to water resources.

Matrix 6 Comments Related to Water Quality

Association	Date	Comment	Status of Comment
California Farm Bureau	9/29/2010	Salts and toxics are management problems in any system of irrigated agriculture, and pricing is a valid policy question.	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to water quality and agriculture.

Matrix 7 Comments Related to Ecosystem Resources

Association	Date	Comment	Status of Comment
California Department of Fish and Game	9/9/2010	Department request Delta Stewardship consideration of the Ecosystem Restoration Program Plan for Year 11 which identifies activities that are scheduled to be accomplished during State Fiscal Year (FY) 2010-2011 and for Federal FY 2011. The Ecological Restoration Program (ERP) continues under the 30 year CALFED Record of Decision (ROD).	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to biological resources.

Matrix 8 Comments Related to Delta Communities

Association	Date	Comment	Status of Comment
California Farm Bureau	9/29/2010	The EWC "alternative" asks the Council to, in essence, depart from the co-equal goals defined in Water Code section 85054 by ignoring water supply reliability for a large portion of California's economy and population. It does this by disclaiming any need for new infrastructure, by calling for the apparent retirement of more than a million acres of productive farmland, by throttling the operations of the Central Valley Project and the State Water Project south of the Delta, and by relying upon sweeping and dubious application of legal doctrine to "reform" the system of California water rights. Perhaps most staggering, it offers a vision of 8 million acre-feet of agricultural water use savings through simple efficiency measures. In reality, this approach would really require the Council to meet the co-equal goal of water supply reliability by finding that California farms and ranches just do not need much water - and that the conveyance solution in the Delta is, essentially, no conveyance.	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to water resources.
California Farm Bureau	9/29/2010	In point of fact, California farms and ranches depend upon reliable water supplies, and California's farmers and ranchers have nearly doubled their production of food and other farm products in the last 40 years while using a largely constant amount of water. More and more crops are on drip irrigation, micro-sprinkler, and other efficient water systems, and yet California remains the nation's top agricultural producer with a farm economy estimated at an annual \$34.8 billion. Farm Bureau expects California to retain its pre-eminent position in agriculture in coming years, always if incrementally on a more water-efficient basis, but sudden "water shock" such as proposed by EWC would cause major disruption to the agricultural economy and California's political fabric.	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to water resources, agriculture, and agricultural economics.
California Farm Bureau	9/29/2010	Salts and toxics are management problems in any system of irrigated agriculture, and pricing is a valid policy question.	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to water quality and agriculture.
California Farm Bureau	9/29/2010	...water recycling, desalination, groundwater and surface storage, and constant efforts at urban and agricultural efficiency are all potential parts of the water solution spectrum for California.	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to water resources.
California Farm Bureau	9/29/2010	What is most problematic with EWC's vision is that it is unbalanced, it remains export- and agriculture-centric, and it may obscure obvious policy necessities by placing a large and politically untenable burden on California farms and ranches...	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to water resources, agriculture, and agricultural economics.

Matrix 8 Comments Related to Delta Communities

Association	Date	Comment	Status of Comment
California Farm Bureau	9/29/2010	...strictly in environmental terms, it should be noted that the inevitable outcome of the EWC "alternative" is the off-shoring of much agricultural production to other countries, which is an environmentally myopic approach. Few countries have the regulatory framework that California farmers operate within, and whether measured in food-miles or measured in terms of comparative local environmental impact, the general global result is the California agriculture is the preferred environmental alternative.	This comment will be used in the development of the Delta Plan, Delta Plan EIR alternatives, and impacts assessment related to agriculture and economics.

Matrix 9 Comments Related to Risk Reduction

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	The keys to emergency response are planning, preparation, and practice (the three P's). Omission of any one of these is a bad idea.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Emergency response with regard to Delta flood risk has two main flavors: (1) protection of life safety, and (2) protection of water transmission and property (economic issues). Environmental issues are also important, but they will be less urgent in any disaster scenario.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	There are three basic types of risk or "threat": (1) "regular" non-seismic levee failures (e.g. overtopping, through-seepage and erosion, underseepage, slope instability, burrowing rodents, etc.), (2) potential terrorism, and (3) seismic levee damage.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	As we discussed, levees are very challenging due to the adverse terrain and geology upon which they must be sited, their lengths traversed, inadequate budgets for engineering field exploration and also for analysis, lack of public and political attention for long time spans, lack of budgets and/or attention for long-term maintenance, ongoing degradation over time (settlements, cracking, progressive erosion, etc.), and other issues.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	It will never be cost-feasible to render the roughly 1,100 miles of levees in the Delta fully immune to potential failure, so we can expect that non-seismic failures will continue to occur over time.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	High water events are predictable (they can be accurately forecast), and so they are usually monitored... "Flood fighting" is the combined activity of: (1) locally inspecting and closely monitoring levees (usually by driving along the levee crests and walking the levee faces and toes) during high water events, and then (2) intervening (with construction crews, equipment, and materials) to attempt to forestall any incipient failures before they can develop fully... Many Delta islands are sparsely inhabited, and many Delta levee districts (islands) in the Delta cannot afford much or any flood fighting, and so many Delta levees are often poorly monitored during periods of high water risk. And, occasionally, levees fail not during high water events; so they "surprise" us.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 9 Comments Related to Risk Reduction

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	...one of the keys to life safety is to understand that Delta floodwaters will be cold; typically on the order of 45° to 60°F, and that people cannot long persist (nor swim) in such temperatures...Saving lives in the Delta means getting people quickly out of the water. Fortunately, for non-seismic levee breaches, that is a fairly straightforward task. When non-seismic levee failures occur, they are finite “breaches”. These initiate at a given location, and then as the floodwaters begin to rush through into the island these widen and deepen due to erosion (or “scour”) from the inrushing floodwaters. They often grow to widths of several hundred feet in the first hours, and then widen (and deepen) more slowly after that as the inrushing waters are slowed by the waters already ponding within the island or tract. Because these are openings of finite width, the islands fill relatively slowly. It can take up to a couple of days to fully fill a large island. So the waters rise relatively slowly. The result is a low level of risk with regard to life safety, as people have time to migrate to higher ground (e.g. the top of the nearest levee).	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Response would thus entail learning about the breach, and then mobilizing and delivering the necessary helicopters and boats. DWR are usually among the first to be notified when breaches occur, and both DWR and 911 notifications need to be routed to those who can best provide the necessary rescue resources. Preparation would consist of “education” of inhabitants as to the risk, and telling them to make their way to the nearest levee crest road if they possibly can. Otherwise, stay put and wave down rescuers as they arrive. Helicopters and boats would have to be available, and operators of those would have to understand the situation and the timeline (as the waters rise.) Also the dangers of submerged obstacles that might sink boats. Again, planning and practice.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Recent exercises have consisted of putting small numbers of people (usually a dozen or less) into relatively warm puddles in the Delta, and then lifting them to safety with helicopters and winches; and announcing that we are well prepared. That is falsely reassuring and not very useful. Better practice scenarios would entail plucking people from rooftops or windows of buildings, with overhead power lines and antennas as possible complicating obstructions, and likely in the wind and rain (as these usually accompany high water events.) Both boats and helicopters would likely be needed.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 9 Comments Related to Risk Reduction

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	<p>Levee breaches are repaired by first “armoring” the two ends of the opening to prevent further erosion as tides carry water into and out through the breach twice each day. Large rock is used for this armoring. There are only a finite number of quarries that can produce such rock in the region, and only one that can do so quickly and in bulk. That is the Dutra quarry on the shore of San Pablo Bay, and it is constantly under legal siege from nearby homeowners who wish to shut it down to eliminate the noise (explosives blasting) from the quarry...The need for rock in the Delta is certainly a strategic security issue for the State of California, and likely also for the Nation, and it has long been my recommendation that either the State or the Fed’s declare the Dutra quarry a vital strategic resource and so protect the availability of rock for the coming century (or so)...The other potential sources of rock are quarries in the foothills to the east, but they cannot produce it quickly in similarly large quantities, and it must be transported by trucks (rather than by barge). If rock from these other quarries was to be stockpiled in sufficiently large quantities, then the strategic need for the Dutra quarry could be reduced.</p>	<p>This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.</p>
Commentor (Ray Seed)	9/16/2010	<p>An important policy consideration for the Council is that, prior to about 2004, the U.S. Army Corps of Engineers (USACE) used to respond jointly with DWR to address and repair Delta levee breaches. Then it was realized that the Corps was actually not supposed to be doing that; it was beyond their mission, especially as most Delta levees are “non-project” levees in which the Corps officially has no stake. So now DWR are on their own. DWR can handle single breaches, but as we will next be discussing first multiple breaches, and then even worse seismic damage scenarios, it will become important to consider how Federal (and even potentially military) assets might be mobilized. As a policy issue; the security and reliability of the Delta and its water transmission role are key State and National security issues, and it should be possible to get the USACE formally tasked to respond to levee failures that are larger than a single, isolated breach (e.g. by Act of Congress, or similar.)</p>	<p>This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.</p>

Matrix 9 Comments Related to Risk Reduction

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	Retrieval (unwatering) of property and assets (buildings, rail lines, gas facilities, etc.) has historically been done by pumping out the islands, but there has been no systematic effort to then help with restoration of functionality. And that has worked fine so far. Most people (and corporations, etc.) understand that there is some risk, and they have historically made their own efforts to restore their assets. Or to insure them. Some thought might be given to this by the Council. Trains can be re-routed around a damaged island, and supplemented with trucks, until disrupted rail service is restored. The PG&E gas storage facilities in the central Delta are interesting, as the Bay Area relies heavily on those during December and January (as gas transmission capacity is too limited to bring enough gas to the Bay Area during these two cold months); but we are hardly the North Pole, and this may be an acceptable risk. The current precedent is to let people (and corporations and utilities, etc.) fend for themselves in this regard. Changing that could open a can of worms. But changing the levels of protection provided Delta-wide as part of the evolution of the Delta under the Council's benevolent new management may eventually require consideration of policy changes here, as well as other potential steps such as grouping (or "bundling") of key assets into protected islands or corridors, etc.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	In the unusual situation wherein several levee failures occur during a single event, the issue would only be one of scale. Sufficient resources would need to be available to address several rescues, and several levee repairs. DWR would be somewhat challenged to handle this on their own, and it is here that pre-arrangement for sharing of resources and responsibilities with Federal agencies (e.g. the USACE, the Coast Guard, etc.) might begin to be especially valuable.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	being prepared for potential seismic disruption of the Delta; as will be discussed next. What is missing here, on a policy level, is a requirement that water agencies maintain some required minimum reserve for emergencies.... no matter what. Also, a requirement that water agencies do a better job of cross-connecting their lines so that in a serious water emergency the State can literally commandeer water and move it to where it is most needed.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 9 Comments Related to Risk Reduction

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	The main differences between non-seismic and seismic levee damage, however, are those of scope and scale. Non-seismic levee failures can produce a limited number of localized “breaches”, each of which can be relatively quickly repaired. An earthquake can produce soil liquefaction (loss of strength of sandy levee foundation soils and sandy levee embankment soils) such that the soils largely become “fluid” in their characteristics. This can produce catastrophic slumping and instability of levees, and this is not a localized phenomenon; this can occur for many contiguous levee miles. A mid-sized east bay Earthquake can produce many tens of miles of such failures, and larger events can produce more than a hundred miles of levee failures and slumping. The result will be damages that simply cannot be rapidly repaired. Much of the Delta will be temporarily transformed to a shallow inland bay. We will not be “filling” in finite holes (or “breaches”), instead we will be re-constructing many miles of levees largely from scratch. And much of the work will have to be done from barges. With no finite holes to fill, large rock will not be needed to armor the ends of breaches. Instead, dredging and wholesale earthmoving on a massive scale will be needed to rebuild the damaged and slumped levee sections. It will take multiple years to accomplish this, especially if we do not make realistic and prudent preparations in advance (as is the current situation). Accordingly, restoration of water delivery will instantly become both the top State and likely also the top National priority.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Because of the lack of warning, seismic damage and flooding will come as a surprise. The scale of the damage, which may include flooding of a majority of the Delta islands in a worst case scenario, will be extensive. Because we will not be dealing with “breaches” of finite dimensions, some islands will fill very quickly, and the rapidly rising floodwaters will pose a significant threat to life safety. And the Delta will not be the only location affected. Appurtenant regions (e.g. the more populous Bay Area, Sacramento’s “pocket”, Natomas basin, etc.) will also likely be affected, so emergency response assets will be stretched in many directions all at once.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 9 Comments Related to Risk Reduction

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	Given that tens of thousands of people may have to be rescued very quickly from what will quickly become dangerously deep waters in the Sacramento “pocket” and/or from the Natomas basin, it may be anticipated that many in the Delta will simply have to fend for themselves in the critical first few hours. Preparation, and education, will thus be vital. People will need to understand the potential risk, and to have thought about what they will do. Boats will be needed, on each island or tract, that can float freely to the surface as the waters rise, and that have gas for their engines so that they can serve as a local rescue capability. People who can’t make their way to a nearby levee crest (or who have no nearby levee crest because it slumped away beneath the waters) will have to be shuttled to intact “high ground” (surviving levee crests) to await further rescue. Time will be of the essence, and people with boats will have to be taught to deposit their own families on the remaining intact levee crests, and then go back for others, rather than spending an hour or more to get their own families fully removed to solid ground. In the cold waters, those who are not quickly removed from those waters (e.g. 20 to 30 minutes or less) will suffer hypothermia, and then they will drown.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	In legacy towns, which have higher concentrations of people, it would be advisable to provide some number of buildings of sufficient height (and with sufficient rooftop accessibility, even for the old and infirm) as to represent a temporary refuge above the waters until rescue can arrive. Ditto for “urban” communities around the edges of the Delta.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 9 Comments Related to Risk Reduction

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	Current estimates are that it will take three to five years to restore the Delta sufficiently as to resume water transmission and delivery to the Bay Area and to southern California. That will create a situation without precedent, and it is difficult to predict how that will play out with regard to potential abrogation of environmental laws and other expedient measures to restore water delivery as quickly as possible. A better solution would be to be prepared for this before it happens. We are currently fully unprepared. Preparation would include considering serious, and potentially feasible options for dealing with a water system disaster. Potential rationing and even State or National commandeering of water supplies may occur. The San Joaquin River system, and its dams, may be re-directed towards providing water for delivery south-of-the Delta, and farming (and use of pesticides and fertilizers) in the San Joaquin watershed may be banned for several years to improve runoff quality and amounts. But that will not likely be nearly enough. Emergency storage south-of the-delta will, of course, also be vital. We will all have to hope that these emergency storage reserves have been diligently maintained, even in the face of what usually appear to politicians and decision-makers as “more urgent” short-term demands on such water. As a policy matter, utilities could be required to be fully diligent with regard to such emergency storage; even in the face of “regular” drought, etc...	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Current efforts to stockpile rock are useful for individual, finite, non-seismic failures but they will be of little value for seismic damages (except for the potential use of mobile rock barriers to re-direct streams and channels as the levees begin to be restored.) What will be needed will be massive resources, of the type that only the Federal government can reasonably bring to bear. And barges...There are only a finite number of construction barges able to do this type of work from the water available on the west coasts of North and South America. We'll need all of them, or at least as many as we can get, and plans should be made for acquiring them. Additional barges are available on the east coasts, and they can be brought through the Panama Canal.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 9 Comments Related to Risk Reduction

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	Plans should be in place for restoration of levees and also for restoration of water system serviceability. Ecosystem considerations should be included in the criteria, and ecosystem advocates should be positively engaged here based on the understanding that in the alternative of workable solutions the resulting chaos will likely lead to less attractive approaches that will produce devastating ecosystem damages. In the all too likely case that constructive agreement proves to be unworkable, then tough decisions and contingency plans will have to be made in the absence of agreement.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	It will be vital to coordinate local, State and Federal water utilities and agencies. Collaborative wielding of resources (especially storage reservoirs, and their controllable releases, and pumps, etc.) will be of vital importance, and probably over a period of several years. Response planning should include gathering together the key State and Federal decision-makers in a command center, where all necessary information can be made available and where the necessary decisions can be made; in the first hours, over the first days, and over the weeks and months that will follow. Prior agreements will have to have been reached as to who is in charge. Petty rivalries will have to be put aside. Leadership will be needed. And “practices” will have to be held. Role playing scenarios in which the actual parties work their way through scenarios, learning their roles, tuning the overall response plans, and getting to know their counterparts (partners) from other agencies and services.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Plans B and C might look like: (B) planning to re-work the San Joaquin River system to provide as much water as possible for south-of-Delta water needs, severe rationing, banning water use for landscaping outright, etc., in order to stretch emergency water supplies as far as possible, and (C) placing large soil berms along selected sections of a through-Delta channel that might then be “rapidly reparable” in the wake of a major seismic event.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.

Matrix 9 Comments Related to Risk Reduction

Association	Date	Comment	Status of Comment
Commentor (Ray Seed)	9/16/2010	Wide soil berms could be placed now, in preparation for a potential seismic event, on the landward side of the levees along such a channel (on the agricultural fields) with little adverse ecosystem impacts. If sections of the adjacent levees then slumped and failed during the earthquake, the adjacent elevated berms would be available to serve as the already partially constructed bases of the new (replacement) levee sections. For sections that do not slump and fail, the adjacent berm materials (soils) would be available as borrow material for use in construction of replacement levees at sections which did suffer damage. And again without major adverse ecosystem impact, as would otherwise occur with dredging of levee fill soils from the river channels. Seasonal re-establishment of partial water delivery might be rapidly accomplished in this manner, and moveable rock berms could be used to direct (and re-direct) flows as necessary due to changing water conditions and ongoing repair progress. This would be a crude and temporary water transmission system, and far from a perfect solution.	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Short-Term Actions: 1. Realistic Emergency Response Plans (vs. "Denial"): - Realistic appraisal of the actual situation. - Logistics (contacts, coordination, resources, chain of command, etc.) - Boats.... the "Natomas Navy", on every island and tract; untethered on their trailers and with 30 feet of rope, so that they can float to the surface and be available as rescue craft. Map the locations of these, and provide boats for communities that don't have enough. The cost would be low (most would volunteer), and administrative costs would be low as well. - Evacuation (mandatory standards....) - Plan, and practice - Cost of preparation vs. the cost of not being prepared (e.g. new Orleans) - The adverse role of denial in public policy and public safety - The value of back-up Plan's B (e.g. the Deepwater Horizon platform disaster and oil spill	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Short-Term Actions: 2. Warning and Notification (and Education): - Two blue lines on lamp posts and sign posts at the 100-year flood level - Mapping and disclosure - Teach appropriate personal/family response planning	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.
Commentor (Ray Seed)	9/16/2010	Short-Term Actions: 3. Preparation: - Building codes: require neighborhoods potentially susceptible to deep inundation to have some accessible rooftops above the 100-year flood level - In New Orleans, the new building codes require potential egress from attics so that people won't again be trapped and drowned by rising waters - Maps of locations of boats/boat marshals..... provide additional boats where needed - Improve levees/flood protection for larger communities...	This comment will be used in development of the Delta Plan and Delta Plan EIR alternatives, and in the impact assessment of levee risk issues.